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TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	09/641,034
		Filing Date	August 16, 2000
		First Named Inventor	YONEDA TOSHIYUKI
		Group Art Unit	1653
		Examiner Name	MAYES, LAURIE A.
Total Number of Pages in This Submission	12 (including fax cover sheet)	Attorney Docket Number	BEAR-006
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Firm or Individual Name	PAULA A. BORDEN, Reg. No. 42,344		
Signature			
Date	July 9, 2003		

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Typed or printed name	Cindy Kim Hoang
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Date	July 9, 2003

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Name	Cindy Hoang	
Signature	<i>Cindy Hoang</i>	
Date	July 9, 2003	
SUPPLEMENTAL AMENDMENT UNDER 37 C.F.R. §1.111 Address to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Attorney Docket Confirmation No.	BEAR006 3757
	First Named Inventor	T. Yoneda
	Application Number	09/641,034
	Filing Date	August 16, 2000
	Group Art Unit	1653
	Examiner Name	J.A. Mayes
	Title	<i>Integrin binding motif containing peptides and methods of treating skeletal diseases</i>

Sir:

This amendment is supplemental to the response, filed May 5, 2003 and responsive to the Office Action dated February 19, 2003. The February 19, 2003 set a three-month period for response, making a response due on or before May 19, 2003. The initial response was timely filed on May 5, 2003. A petition and fee for a two-month extension of time is filed herewith. Accordingly, this response is timely filed.

In view of the remarks put forth below, reconsideration and allowance are respectfully requested.

FACSIMILE TRANSMITTAL
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Date: **July 9, 2003**

To: **Examiner Laurie Mayes**
Art Unit: 1653
U.S. Patent and Trademark Office

Facsimile No.: (703) 746-6356

From: **Paula A. Borden (Reg. No. 42,344)**
(650) 833-7710

Re: **U.S. Patent Application Serial No. 09/641,034**
Filed: August 16, 2000
Our Ref. No.: BEAR-006

Message: **Please see the attached Supplemental Amendment.**

Total number of pages, including this cover sheet: 12

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I. AMENDMENTS

Please enter the amendments to claims 1, 8, and 16, as shown below.

01 1. (Currently Amended) A peptide consisting of about ten to about 50 amino acids in length, wherein the peptide comprises an amino acid sequence comprising an integrin binding motif, wherein the peptide is further characterized by a biological activity which enhances bone growth, and wherein the amino acids may be in the D- or L- conformation.

2. (Previously Amended) The peptide of claim 1, wherein the integrin binding motif is an RGD sequence.

3. (Original) The peptide of claim 1, wherein the amino acid sequence is contiguous with the RGD sequence in naturally occurring protein matrix extracellular phosphoglycoprotein.

4. (Previously Amended) The peptide of claim 1, wherein the peptide has a length of from about 15 to about 35 amino acids.

5. (Original) The peptide of claim 1, wherein the amino acids are in the L-conformation.

6. (Withdrawn)

7. (Previously Amended) The peptide of claim 1, comprising the sequence TDLQERGDNDISPFSGDGQPFD (SEQ ID NO:47).

02 8. (Currently Amended) A peptide characterized by:
(a) consisting of a length of from ten to fifty amino acids;
(b) an RGD sequence;

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- PS
continue*
- (c) an amino acid sequence ~~substantially the amino acid sequence that~~ is contiguous with an RGD sequence of naturally occurring matrix extracellular phosphoglycoprotein; and
- (d) biological activity in promoting bone growth.
-

9. (Previously Amended) The peptide of claim 8, wherein the peptide is selected from the group consisting of

DFEGSGYTDLQERGD (SEQ ID NO:43)

YTDLQERGDNDISPF (SEQ ID NO:44)

ERGDNDISPFSGDGQ (SEQ ID NO:45)

TDLQERGDNDISPFSGDGQPFD (SEQ ID NO:47).

10.-11. (Withdrawn)

12. (Original) A formulation comprising:

a carrier; and

a therapeutically effective amount of a peptide of claim 8.

13. (Original) The formulation of claim 12, wherein the carrier is a saline solution and the formulation is injectable.

14. (Original) The formulation of claim 12, wherein the carrier is a paste and the formulation is a toothpaste.

15. (Original) The formulation of claim 12, wherein the carrier is an aqueous flavored solution and the formulation is a mouthwash.

03

16. (Currently Amended) A pharmaceutical formulation, comprising:

a pharmaceutically acceptable carrier; and

a therapeutically effective amount of a peptide ~~having a length~~ consisting of from ten to fifty amino acids which amino acids correspond to an amino acid sequence of naturally occurring

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①3
conclude protein matrix extracellular phosphoglycoprotein and comprising the RGD sequence of
phosphoglycoprotein, the peptide further characterized by enhancing bone growth in a maminal.
